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Paradoxes of Online Teaching

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Keywords
Online teaching, Teacher education, Self-study, Higher education

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While much attention is paid to students' experiences in online courses, there is sparse information regarding the experiences of faculty who teach online. Two university instructors address this gap in the literature and present an analysis of their experiences teaching graduate and undergraduate teacher-education classes at a university in the Midwestern United States. In this collaborative self-study, the authors analyze data consisting of their reflections and discussions, anonymous student surveys, anonymous course evaluations, and online observations by other faculty. They argue that online instruction poses several paradoxes. These paradoxical experiences illuminate the need for additional research about faculty experiences with online teaching. Based on their experiences and research, the authors recommend faculty development in online pedagogy.

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Introduction

Online courses are increasing in popularity. It is estimated that 90% of colleges in the United States offer online courses (Olson & Werhan, 2005), and that in one in ten faculty members teach online (Conrad & Pedro, 2009). However, Garrison and Anderson (2003) report that the influence of online instruction on educational institutions has resulted in only a slight enhancement of current practices. Furthermore, there are reports of extremely high dropout rates in online courses (Dietz-Uhler, Fisher, & Han, 2008). It appears that the adoption of online instructional technology has outpaced our knowledge of how it might best be used for instruction (Li & Akins, 2005; Stodel, Thompson, & MacDonald, 2006). For online teaching to be an effective instructional tool for current educators, we need a better understanding of its strengths and weaknesses.

The Sloan Consortium (2002) has listed five pillars of quality for online courses: (a) learning effectiveness, (b) cost effectiveness, (c) access, (d) student satisfaction, and (e) faculty satisfaction. There is considerable research verifying that online courses result in a learning experience that is as effective as face-to-face courses (Russell, 2000) and that they are a cost-effective means of increasing access to higher education. However, while technology has been found to facilitate ease of access to students, at the same time there is a persistent digital divide between students from White and affluent families and Black, Hispanic, and low socio-economic families (DeBell & Chapman, 2006).

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A growing body of research documents factors that lead to learner satisfaction in online courses. These include factors such as clarity of course design and organization, responsiveness of the instructor, and a sense of community in the online class (Liu, Magjuka, Bonk, & Lee, 2007; McInnerney & Roberts, 2004). While there is much attention paid to students' experiences in online courses, there is sparse information available about the experiences of faculty who teach online courses (Kearsley, 2010; Marthann, 2010; Shedletsky & Aitken, 2001). Faculty satisfaction has been found to be more complex and harder to predict than student satisfaction (Bolliger & Wasilik, 2009).

We do know that faculty exhibit a low level of acceptance of online education, which is a significant barrier to the adoption of online instruction (Allen & Seaman, 2007; Maguire, 2005). One reason for this might be that online teaching entails more work, and different kinds of work, than face-to-face classroom instruction. For example, Gagne and Walters (2009) have reported that for some faculty, "keeping up with technology is like chasing the wind" (p. 584); faculty feel in constant motion, using ever-newer resources, yet with only a vague sense of where it leads. However, findings regarding faculty workload in online vs. face-to-face classes are inconclusive. Some researchers (Cavanaugh, 2006; DiSalvio, 2007) have demonstrated that teaching online takes more time than face-to-face instruction because of the need for individualized, text-based interaction. On the other hand, others (Andersen & Avery, 2008; Thompson, 2004) have reported no difference between the amounts of time required for online or face-to-face classes.

In either case, it is generally accepted that online educators experience a change in their role from instructor to guide (Coppola, Hiltz, & Rotter, 2002; Ryan, Carlton, & Ali, 2004). Teaching online involves a shift to the sidelines, from being a visible center of attention in the face-to-face classroom to serving as a designer and facilitator of online experiences. This is a shift for which many faculty members are unprepared.

Following a qualitative meta-synthesis of faculty experiences with online teaching, Gagne and Walters (2009) concluded that more research is needed to understand fully the *emic* account, or insider perspective, of those who teach online. According to Wray, Lowenthal, Bates, and Stevens (2008) and Cavanaugh (2006), there is little research on the differences in faculty perceptions about teaching the same course online and face-to-face. Likewise, Kearsley (2010) has stated that we simply do not understand the nature of online teaching well enough to advise how to improve it.

In this paper, we address the gap in the literature around understanding faculty experiences of online teaching, and present an analysis of our experiences teaching online graduate and undergraduate teacher-education classes at a university in the Midwestern United States. We believe that systematically inquiring into our own teaching in a way that can be publicly examined and built upon by our peers is a necessary component of the scholarship of teaching and learning.

Conceptual Framework

Garrison and Vaughn (2008) present a framework that can be used to conceptualize the work of online instruction. This framework suggests three elements for consideration when teaching online: social presence, cognitive presence, and teaching presence.

Social Presence

There is no clear agreed-upon definition of social presence. Nonetheless, many have argued that social presence is the first component that needs to be addressed in an online setting (Aragon, 2003). Shin (2002) has defined social presence as "feeling intimacy or togetherness in terms of sharing time and place" (p. 22). Others have defined social presence as the "ability of learners to project themselves socially and emotionally in a community of inquiry" (Rourke, Anderson, Garrison, & Archer, 1999, para. 3) or as the "degree to which a person is perceived as a 'real person' in mediated communication" (Gunawardena & Zittle, 1997, p. 9). Since online classes lack the physical presence of face-to-face settings, the issue of social presence in an online learning environment is a particularly important one. Social presence helps to create a community and make the learning enjoyable and rewarding, which in turn increases participation and motivation to learn.

Cognitive Presence

Cognitive presence is perhaps the most important aspect of online instruction since the primary purpose of an educational experience is to achieve cognitive learning outcomes. Although social presence is a prerequisite to the learning environment, if learning is to occur, the interactions need to be structured and systematic, not merely social (Stodel et al., 2006). Garrison, Anderson, and Archer (2001) have defined cognitive presence as "the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry" (p. 11). Cognitive presence, therefore, refers to the degree of inquiry and critical thinking that learners engage in during the class.

Teaching Presence

Teaching presence is that part of the online teaching-learning process over which the teacher has the most direct control. A sustained teaching presence is necessary to provide the balance between social and cognitive presence. Without this, the course can devolve into a social setting with little cognitive focus or into a form of programmed instruction with little support for the learner. According to Anderson, Rourke, and Archer (2001), the concept of teaching presence has three components: (a) the design and organization of the course, (b) facilitation of the online discourse, and (c) direct instruction.

Within this framework, the teacher has many responsibilities (Garrison & Anderson, 2003). The first responsibility is to establish curriculum content, learning activities, and course timelines. An effective online class needs to be well-structured and organized. The second responsibility is to monitor and manage purposeful collaboration and reflection. The teacher must facilitate the dialogue and reflection and sustain the discourse over the course of the semester. The teacher's third responsibility is to diagnose learner needs and provide timely directions so that the intended learning outcomes are achieved. A strong teacher presence is necessary to facilitate a supportive and nurturing social presence, while at the same time creating a critically challenging cognitive environment.

Method

Context of Online Instruction

Both authors have taught in various formats, including bi-weekly and weekly face-to-face classes and online classes. The analysis in this paper is based on our experiences teaching online courses during the Winter 2010 semester. We use the term *online* to refer to Web-based courses where the majority of the instruction occurred when the instructor and

learner were separated by time and space. All of the course content was delivered electronically using documents, videos, and some audio components. Both of us used the Blackboard course management system. Most of the interaction was asynchronous. Each of us had one mandatory, three-hour, face-to-face class session at the beginning of the semester.

The first author taught an online undergraduate course about historical and social foundations of education called "Diverse Perspectives in Education." There were 15 traditional-age, pre-service teachers in this course, most of whom were in their junior year. Weekly learning units were used to deliver content that included commentary on the required readings, some PowerPoint presentations, questions and prompts for further reflection, and links to various types of electronic sources. Throughout the semester, students in this class worked in groups to analyze and discuss three case studies, and additionally wrote individual, weekly, reflective journals.

The second author taught a graduate research methods course called "Educational Inquiry and Evaluation." There were 29 students enrolled in two sections of the course. All of the students were working as teachers, administrators, or professional school staff. Weekly learning modules were used to deliver content about quantitative and qualitative research methods. The modules included chapter outlines and narrated PowerPoint presentations. Students in the class participated in five asynchronous online discussions. They worked in groups to moderate the discussion board and to conduct peer reviews of each others' papers prior to submission to the instructor.

Self-Study Design

To analyze our experiences as online instructors, we utilized a self-study approach. Self-study is the process by which teacher educators reflect on their own teaching practices (Loughran, 2002) with the goal of self-improvement. Although self-study is characterized by personal inquiry, teacher educators often work collaboratively to gather data and reflect upon patterns and trends. Thus, individuals are able to reflect upon their individual practice with others engaged in similar practices (Samaras & Freese, 2006). It is important to note that self-study refers to the focus of the study but not necessarily the way it is carried out (LaBoskey, 2004). Therefore, self-study researchers usually draw upon a variety of qualitative data sources to increase the credibility of their findings. Through self-study, the work of teacher educators is thus made available to the professional community for deliberation and evaluation.

Data Sources

In examining our experiences with online teaching, we drew from several sources of data. The first was our own reflections about our experiences teaching online. These experiences, recorded in a journal (Richardson, 2000), included reactions and ruminations about various situations we encountered and feelings we experienced while teaching online. The second source of data was anonymous student feedback obtained through mid-term and end-of-term surveys. Our course evaluations provided a third source of data. Finally, feedback provided by colleagues who conducted online peer observations provided the fourth source of data.

We began with the desire to improve our online classes. Initially, we gathered and analyzed data and reflected upon our individual experiences teaching online courses. In sharing these reflections with one another, we found that, although we were teaching different classes, we were both grappling with similar issues. For example, we were both experiencing a sense of isolation because of our online teaching load. Partly to alleviate this isolation, but also

seeking to think collaboratively about our struggles, we decided to utilize a collaborative approach to self-study. Sharing our individual analysis with each other helped us to reflect upon our instructional practices and consider alternative meanings of our experiences.

Data Analysis

Our data collection and analyses occurred simultaneously, with initial analyses promoting deepening insights. This, in turn, guided additional data collection (Kirby & McKenna, 1989). To draw connections between our study and current research, we also read professional literature about online instruction and teacher education. We analyzed the data from each of our courses individually and then analyzed them together, looking for common themes and patterns across our experiences.

We used an inductive approach (Glaser & Strauss, 1967) to analyze the text generated from our classes (i.e., our reflective journals, posts on discussion boards, student comments on surveys and course evaluations, peer observation narratives). First, we generated conceptual codes to summarize key issues that emerged from the data (e.g., social, emotional, cognitive, affective, accessible, connecting, instantaneous, and reflective). We then combined codes into categories (e.g., access, reflection, engagement). It soon became apparent that some of the categories were in contradiction to one another (e.g., isolated vs. connected; reflective vs. spontaneous; private vs. public; formal vs. informal; quantity vs. quality).

To capture the contradictions we were experiencing, we drew upon Parker Palmer's (1998) notion of paradox. Palmer defines a paradox as being the coexistence of two competing truths. In his discussion, he cites Nobel laureate Niels Bohr's words: "The opposite of a profound truth can be another profound truth" (Bohr, as cited in Palmer, 1998, p. 62). This suggests that opposite truths can both be valid, yet their coexistence creates a dilemma or dissonance for an individual. While some people might reject one of the conflicting thoughts to resolve the tension, we sought instead to understand the implications of the contradictions for our teaching practices. By reflecting on these paradoxes, we hoped to achieve a more penetrating understanding of our experiences as instructors of online courses.

Results

An analysis of our experiences yielded six major paradoxes. We have organized the six paradoxes under the three main theoretical constructs of social, cognitive, and teaching presence:

1. Social presence
   - Technology brought faculty and students together and it separated them.
   - Computer-mediated communication was private and it was public.

2. Cognitive presence
   - Asynchronous text-based discourse facilitated engagement and it inhibited engagement.
   - Students had more information and were less informed.

3. Teaching presence
   - Online teaching required flexibility and it required structure.
   - Technology made work easier and faculty worked harder.

Social Presence

Technology brought faculty and students together and it separated them.

As we designed our courses, we created numerous opportunities for students to interact with each other, the text, and the instructor: online discussion boards, small-group work, and weekly e-mail communications. Students in distant locations reported that they appreciated being able to connect with students, the instructor, and the online databases without having to commute to the campus. Furthermore, the online format opened up access to ideas from more students than a face-to-face class might have. As one student reported:

> I like getting the different perspectives of all the classmates, this is often hard to do in a classroom setting where people often sit and associate with the same group of people daily. In this format, I get to converse with all classmates on an equal basis.

However, since the bulk of these online interactions related to course content and assignments, they did not provide students with an opportunity for social interaction. Students seemed to miss the physical presence of other students. As one graduate student stated, "I miss getting to know my fellow students and interacting with them on the human level." Another wrote, "Online feels distant. I don't like being separated from others." Some students felt they were missing out on the networking aspect of the class: "I like to use classmates as a sounding board. Although we have the online discussion boards, it just is not the same."

Most students found the face-to-face sessions to be valuable and some felt that more face-to-face sessions would be beneficial: "You should have two or three face-to-face sessions and make them mandatory," suggested one student. At the same time, some of the students who were working adults with families had chosen the online format for convenience. They were not looking for social interaction. They preferred to only engage cognitively with the course.

Being aware of the importance of online interactions, we actually spent more time communicating with individual students than we usually do in traditional instructional settings. Despite this, both of us experienced a feeling of social isolation. Since communication was conducted looking at the computer screen rather than at human faces, we lacked the satisfaction of getting to know our students in person. For example, at the college graduation ceremony, while we recognized many of the names and faces of our online students who were graduating, we felt that these students did not know us in the same way as did our students from face-to-face classes.

Furthermore, not needing to go to class or our offices as often also meant that we did not see our colleagues as frequently. We missed the human contact that usually helps sustain us in the midst of challenging work lives. This further exacerbated the feeling of isolation that we were experiencing and altered the nature of our work as university professors.

Computer-mediated communication was private and it was public.

In reflecting on our teaching, we felt that one possible reason for the perceived lack of social presence in our online instruction was our uncertainty, as instructors, with the appropriate tone to use in online communication. We were aware that most online communication was done by a single person sitting at a single computer. This setting gave the illusion of privacy. However, we were conscious that even though an e-mail was sent to one person, it could, in an instant, be made public and forwarded to countless people. We had to write responses to individual students that would be deemed appropriate if read by

others.

Likewise, although everything that transpired in the online class (announcements, discussions, and chats) was restricted to those enrolled in the course, both of us were conscious of the fact that everything could very easily be cut and pasted into a public forum. Thus, we found that although there is an illusion of privacy, the nature of electronic communication potentially makes everything a very public product. Furthermore, we were also aware that the text-based communication could be, and was, very easily saved and archived. It created a permanent record that took on a quality of finality or authoritativeness, something we felt had no parallel in face-to-face conversations in classrooms.

Furthermore, the ubiquity of online communication often seduced us into treating it as casual interactions, much like short conversations people have as they walk through their days. The fact that this is how students perceive online communication was evident in the casual e-mails we received. For example, we frequently got e-mails saying, "Hi, I just have a quick question." One student sent the second author an e-mail with the subject heading "CRAP." When we responded to students, it was tempting to respond in a similarly casual manner. However, we also felt that to respond with casual or familiar language could be interpreted as being inappropriate and unprofessional. At the same time, always responding in a formal tone could be perceived as distancing and uncaring.

When we encountered a similar paradox in face-to-face classes, we found it easier to negotiate. We might have taught in a formal, even distant, manner while presenting to the entire class. Yet, before and after class and during breaks, individual conversations with students could be more personal and informal. In face-to-face interactions, those distinctions were more fully understood. But online teaching conventions are still ill-defined. The "formal" instruction and "informal" casual comments may not be clearly distinct to the students. Thus, we found that our uncertainty toward text-based communication made it challenging to create and maintain a professionally appropriate social presence in the online classes.

Cognitive Presence

Asynchronous text-based discourse facilitated engagement and it inhibited engagement.

We found that asynchronous text-based communication created a fixed text that could be re-read, thus allowing more time for reflection than the more ephemeral oral discussions of face-to-face classes. The time lag afforded by the asynchronous nature of the discussion provided reflective students the opportunity to mull over issues and post their ideas at a time of their choosing. "I don't need to respond right away, I have time to think and can respond when I am ready," commented a student. The discussion board "is allowing me to be more critical in my thinking of the topics of discussion," said another.

While the time lag in the asynchronous conversation allows for such intellectual engagement, we felt that the dialogue lacked the spontaneity of face-to-face communication. Failing to get immediate responses, students often felt inhibited by the silence of their classmates. One student reported that the main disadvantage of online interaction was "not having people respond back to you when you e-mail them. You don't know if they have dropped the class or if they just aren't logging on…" Furthermore, they had no visual cues to interpret how their message was being received. In a world of instant messaging, anything less than instant responses seemed to be perceived as being ignored.

There were periods of awkward silence on the discussion boards when neither the student nor the instructor knew the reason for the silence: were students reflecting on what they

had read, or had they just not read it, or were they having some technical problem? We were also sensitive to the fact that students could be engaged and learning even if they were not commenting. Some students might have been actively reading, processing information, and deepening their thinking about an issue. Sometimes the evidence of this process only showed itself in a later assignment or discussion.

The first author felt that some of the online discussion seemed artificial when compared to discussions in the face-to-face classes. Some of the controversial issues he dealt with in his courses provided the clearest examples of this. When students were asked in traditional classes to engage with a provocative issue, such as a question about racial differences in achievement or various forms of content censorship, they had to confront these issues on the spot. Sometimes students were clearly uncomfortable; sometimes, loud debates arose. The author felt that these were teachable moments that could be both generated through careful instruction and facilitated by a skillful teacher.

However, he found that such interactive and affective experiences were almost impossible to create in online settings. The very nature of being personally separated and having time to deliberate and respond at a time of one's choosing could assuage often the most provocative of statements. He felt that this could be a good thing; students needed to learn how to make measured, thoughtful comments. However, a slow, thoughtful, deliberate response was a different experience than sitting in class next to people who present opposing views on controversial issues. The former experience allowed for clear, constructed, rational responses; the latter experience allowed students to learn how to navigate emotionally-charged intellectual discussions. These were both valuable experiences, and contributed to the development of skills needed in a democracy, as well as skills needed by teachers in the classroom. But they were not interchangeable. He was aware of what was gained and lost in each type of instructional interaction, but felt face-to-face courses could be crafted to allow for both types of interactions. He has not yet found a way to construct an online experience that could re-create what was lost in that setting.

Students had more information and were less informed.
An exciting aspect of the online course was the vast amount of information readily available to students through online databases and the Internet. Without ever setting foot in a library, students could access thousands of sources. Despite the access to information, we found that most students searched only in the most familiar and easily accessible locations (e.g., Google, Wikipedia). Even after hours of training in how to access library databases, we found that students rarely looked beyond the first page of the database screen for articles about their research topic.

Furthermore, for many students, doing a "library search" meant a cursory search of information readily available on the Internet. If a source was not immediately available in full text online, it was as if it did not exist. Because each search yielded so many articles, students quickly became overwhelmed with the surfeit of information. Therefore, they skimmed easy-to-read summaries provided by secondary sources rather than critically going through primary sources.

The first author regularly encountered students who had ample access to a broad knowledge base, yet had superficial, and even skeptical, encounters with this information. They did not have the skills to discern the quality or value of information from various sources. Thus, they used alignment with their personal perceptions as the basis for determining the value of information. This situation encouraged students to engage only with others who agreed with them or supported their own opinions. For example, instead of carefully considering

two sides of an argument, students were able to exclusively select articles that supported their current beliefs or perceptions. Evidence in written assignments was invariably one-sided.

Teaching Presence

Online teaching required flexibility and it required structure.

One of the most obvious advantages of online courses was the flexibility they provided. "I am able to complete the work on my own schedule," said one student. "I can work at my own pace. I enjoy the freedom!!!" reported another. But at the same time, many of these students lacked the self-discipline to deal with the flexibility; they expected the instructor to manage their time. "It would be helpful if you could send us reminders when papers or quizzes were due," was a frequent request. "You need to make more deadlines. It would be a good idea to have a due date for the assignments to submit for peer review and then another date for when the peer review needs to be complete," recommended another. "Could you assign us to peer-reviewers instead of having us choose?" requested another. We found that some students were ill-prepared for the independent work and the broad flexibility allowed in online courses. The first author had students regularly fall behind in their online course work; some had to drop the course entirely. For those students who worked to complete the course, the solution was to provide them with a high degree of structure and inflexible requirements, which included meeting with the instructor face-to-face. Ironically, what allowed these students to complete the online course successfully was re-creating qualities of a face-to-face class and eliminating the more central elements of an online course.

For us as instructors, teaching an online course meant that we did not need to commute to work; we could log into the computer and work on the course at any time. However, this also meant that we needed to check e-mail frequently and respond to concerns as they arose. Although this provided a great deal of flexibility in our schedules, we found that it took more forethought to prepare materials for asynchronous online instruction than for face-to-face teaching. Since information was accessed asynchronously, numerous documents had to be written, and written unambiguously. Since there was no opportunity to read students' body language and detect their confusion, the only viable option was to try to prevent confusion in the first place.

Both instructors felt that the simultaneous demand for flexibility and structure created a paradox regarding their presence in the online course. Our university technology support staff advised us to establish a clear structure for our online courses and not to make changes in the format or organization once the courses had started. To provide clarity, we carefully designed the entire course before it became available to students. At the start of each week we presented learning units containing all the information for that week.

In an attempt to stay current, we created additional components for the course, such as PowerPoint presentations, links to news articles, and new discussion board topics. When students had difficulty finding documents, we made them available in additional locations. We notified students of these changes, but with no well-established habits or etiquette about modifying courses as they proceed, some students felt uncertainty and dissatisfaction. Students felt that once course content had been made available and a pattern of use had been established, change was unacceptable. "It is confusing when you add new information after the module has been made available," complained one. "I am not sure where all I should be checking because I don't want to miss anything important," said another. Ultimately, we felt that this expectation from the students, that the structure of the

course should be immutable, deterred us from using some of the benefits of flexibility and adaptation inherent in online instruction.

Technology made work easier and faculty worked harder.
We found that technology did reduce some types of work, such as (a) not having to deliver the same content to multiple sections, (b) having multiple-choice exams graded automatically, (c) being able to easily quantify students' participation in online discussions, and (d) the ease with which assignments could be collected and returned electronically. While we saved time by not having to deliver lectures on campus, we found that it took more time to prepare the course materials and respond to students' e-mails for online courses. Also, it was significantly more work to provide critical feedback to students' papers (e.g., download, insert comments, track changes, and upload each paper) and to facilitate and respond in writing to the substance of discussion board postings.
Teaching online was also harder because students expected the teacher to be present in the course immediately and in multiple ways. They would post a paper and a few hours later inquire whether we had read it. Written responses were the only way students knew that the teacher was present, and the type and multitude of written comments took much more time than making oral comments to an entire class. The first author felt that online undergraduate students seemed to expect immediate, unlimited, and individualized feedback from the instructor. They seemed to expect the same quickness of response that they would get in class, as if instructors were always online ready to answer their questions. He felt that such student expectations were rooted in their experiences with the service industry, where one could get a response to many technical or financial questions almost any hour of the day or night.

Both of us found that many students who had signed up for the online course had never used the course management system (Blackboard) and had never accessed the electronic databases of the university library. Both instructors had to spend considerable time providing students with technical support on aspects of technology. Since the university was constantly updating the available technology, we ourselves were novices on using some features like Wimba Pronto for audio feedback and synchronous webinars. Therefore, we felt that keeping up with the ever-changing technology was a constant and never-ending process.

Finally, we experienced a paradox when it came to our facilitation of the online discussions. The second author had required that graduate students moderate the discussion board. She observed that these discussions moderated by the students were rich and meaningful. She also found that when she entered a discussion, students began to respond to her posts instead of each others'. Students who had been moderating the discussion until that point began to defer to her. This sometimes put an end to the conversation. At the same time, when she merely observed the discussion and did not comment, her lack of presence led students and a colleague, who was also observing the discussion, to conclude that she was "not there."

Thus, there were numerous, often conflicting, expectations within online instructional environments, yet few parameters for balancing these expectations. These uncharted expectations further limited our ability as instructors to be present in substantive ways for our students. In short, the expectations for teaching presence were different online than in classrooms, but there was no consistency in how they were different. In the end, this inconsistency required more time-consuming work for the instructors and more effort to establish a teaching presence in our online courses.

Discussion and Conclusions

In this paper we have taken an initial step in exploring the experiences of two online instructors. An advantage of the self-study methodology we utilized to examine our experiences is that it enables practitioners to offer an insider's view of their teaching. However, a limitation of this study is that it represents the experiences of only two instructors. To enhance the validity of our findings, we have tried to explain in detail how data were collected and analyzed (Wade, Fauske, & Thompson, 2008). Nonetheless, our interpretations and conclusions should be thought of as tentative.

Our findings highlight the paradoxical nature of online instruction. We have used the theoretical constructs of social, cognitive, and teaching presence to organize these findings. We feel that the paradoxes we describe have no easy resolution and, therefore, we do not seek to prescribe solutions. Instead, we present the paradoxes as a way of understanding the nuances of online instruction. We also offer suggestions for possible avenues of future research.

First, our experiences emphasized the importance of social presence in the online classroom. It has been reported that students "want to be linked in the network, but they want a lot of face-to face time" (Kvavik, as cited in Garrison & Vaughn, 2008, p. 147). We found that many of the strategies used to facilitate emotional engagement in face-to-face instruction, such as small-group discussions, did not transfer to online instruction. We feel that more research is needed regarding how to enhance social presence in a completely online environment. This might involve an investigation of the use of technologies such as videos, and synchronous experiences for the entire class like webinars.

Second, we found, like others (Al-Shalchi, 2009), that online discussions were a vital cognitive component of our classes. Our findings support what others have found — that online discussion facilitated reflection and provided tangible evidence of critical thinking (Arend, 2009). Just like Ong (1982), we found that writing "fosters more conscious interaction between persons" (p. 179). However, we felt that this self-conscious text-based interaction could limit the nature of online discourse, and prevent spontaneous teaching moments and the opportunity to confront ones' attitudes and dispositions. Additional research is needed about how to create an online space that is intellectually rigorous and emotionally engages students in difficult issues.

Third, we found that teaching presence is clearly necessary in online courses. Researchers have found that a well-mapped-out course "seems to increase learners' competence and confidence" (Stodel et al., 2006, p. 11). Within this well-structured class, some researchers have found that, "If online discourse is to be effective, then instructors must take an active role to assist, or guide, the discussions" (Kanuka & Garrison, 2004, p. 29). Others (Arend, 2009; Mandermach, Gonzales & Garrett, 2006) report that students do more critical thinking in courses where the instructors take a more neutral role. Given our experience and the inconclusive findings reported in the literature, it appears that additional research is needed on the appropriate role of instructors in online discussions.

Finally, we found that online courses require more work on the part of both students and instructors. Allen and Seaman (2007) cite inadequate student self-discipline as one of the barriers to the widespread adoption of online education. While some students are able to manage the independent and individualized work, there are students who want and need more constant faculty involvement (Lindsay, Jeffrey, & Singh, 2009). We also found, like other researchers, that online instruction requires more effort from the faculty than face-to-

face instruction (Lindsay et al., 2009; Shedletsky & Aitken, 2001). Cavanaugh (2006) has reported that the amount of time teaching online was "nearly double" and when broken down to per-student time, "it's five to ten times more" (p. 2). Like Cavanaugh, we too felt that the major difference in the time spent teaching online was the time spent preparing for the course and then communicating electronically with students. Instructional time and space is ill-defined in online courses. Ostensibly, any time we sat at our computers, we could be teaching. This is an area that needs additional research before definite conclusions can be drawn.

Garrison & Vaughn (2008) suggest that *blended learning*, a fusion of online and face-to-face approaches, might be the way to maximize effectiveness and efficiency. The word "blended" (or "hybrid") suggests a way to reconcile some of the paradoxes we have experienced: creating a learning community in an asynchronous environment; maintaining spontaneity while operating in a reflective, text-based medium; and finding a balance between structure and flexibility to optimize student learning.

We are aware that the particular combination of instructional strategies and technologies to be blended will depend on the needs of the students, the instructor, and the particular course content. Instructors can select the best medium for accomplishing each of their objectives. This blend of two mediums will, of course, lead to a greater complexity in the job of instructors. It will require them to rethink course design, manage two environments, and adopt different ways to support student learning.

We recommend professional development for online educators, not only about the technology itself, but about online pedagogy. They need ways to rethink course design and use appropriate technology to facilitate student engagement with the content, other students, and the instructor. According to Jacobsen, Clifford, and Friesen (2002), the real challenge will be to "develop fluency with teaching and learning with technology, not just with technology itself" (p.44). In future years, facilitation skills are going to be one of the skills needed most for online learning (Kyong-Jee & Bonk, 2006). This is a challenge we must address. If not, either technological limitations or administrative management concerns will set the parameters of teaching in this emerging environment. To lose that control or influence over instruction would be to lose completely the soul of the teaching enterprise.

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